

WHAT IS CLAIMED IS:

1. A method for estimating a screen frequency from image data, comprising:
  - multiplying a frequency measurement signal by a factor;
  - adding the frequency measurement signal to an image data signal to produce an output signal; and
  - adjusting the factor multiplied to the frequency measurement signal based on a control signal, wherein the control signal is based on a characteristic of the image data.
2. The method of claim 1, further comprising:
  - measuring a contrast within a window of the image data to produce the control signal.
3. The method of claim 1, further comprising:
  - filtering the image data using a low-pass filter to produce the image data signal.
4. The method of claim 1, further comprising:
  - sub-sampling the image data to produce the image data signal.
5. The method of claim 1, further comprising:
  - interpolating the output signal to produce the screen frequency estimate.
6. The method of claim 1, further comprising:
  - subtracting a frequency signal from the image data signal, to produce the frequency measurement signal.
7. The method of claim 1, further comprising:
  - outputting the output signal which is an estimate of the screen frequency, to a de-screening device.
8. An apparatus for estimating a screen frequency, comprising:
  - a multiplier which multiplies a frequency measurement signal by a factor;
  - a combiner which combines the multiplied frequency measurement signal with an image data signal to produce an output signal; and

an adjuster which adjusts the factor multiplied to the frequency measurement signal based on a control signal, the control signal being based on a characteristic of the image data.

9. The apparatus of claim 8, further comprising:  
a contrast measuring device which measures contrast within a window of the image data to produce the control signal.
10. The apparatus of claim 8, further comprising:  
a low-pass filter for filtering the image data to produce the image data signal.
11. The apparatus of claim 8, further comprising:  
a sub-sampling filter for sub-sampling the image data to produce the image data signal.
12. The apparatus of claim 8, further comprising:  
an interpolator for interpolating the output signal to produce the screen frequency estimate.
13. The apparatus of claim 8, further comprising:  
a subtracting module for subtracting a frequency measurement from the image data signal, to produce the frequency measurement signal.
14. The apparatus of claim 8, further comprising:  
an output device for outputting to a de-screening device the output signal which is an estimate of the screen frequency.
15. An apparatus for estimating a screen frequency, comprising:  
means for combining a multiplied frequency measurement signal with an image data signal to produce an output signal; and  
means for adjusting a factor multiplied to the frequency measurement signal.
16. The apparatus of claim 15, further comprising:  
means for measuring contrast of the image data;  
means producing the image data signal;  
means for producing the screen frequency estimate; and  
means producing the frequency measurement signal.
17. A computer-readable medium or a carrier wave encoded to perform the method of claim 1.

18. A xerographic marking device using the method of claim 1.
19. A digital photocopier using the method of claim 1.